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EXAMINER	
GIBBS, TERRA C	

ART UNIT	PAPER NUMBER
1635	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No.	Applicant(s)	
	10/594,939	SUGIYAMA ET AL.	
	Examiner	Art Unit	
	TERRA C. GIBBS	1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *5,9,14,16,18 and 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-8,10-13,15,17 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/4/08; 3/20/08; 1/22/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is a response to Applicant's Election filed November 14, 2008.

Claims 6, 7, and 10-12 have been amended.

Claims 1-20 are pending in the instant application.

Election/Restrictions

Applicant's election, without traverse, of Group I, claims 2-4 in the reply filed on November 14, 2008 is acknowledged.

It is noted that claims 1, 6-8, 10-13, 15, 17, and 19 links the invention of Group I. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claims, claims 1, 6-8, 10-13, 15, 17, and 19. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Claims 5, 9, 14, 16, 18, and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on November 14, 2008.

Accordingly, claims 1-4, 6-8, 10-13, 15, 17, and 19 have been examined on the merits.

The restriction requirement is still deemed proper and is therefore made FINAL.

Information Disclosure Statement

Applicants Information Disclosure Statement filed January 22, 2008 is acknowledged. The submission is in compliance with the provisions of 37 CFR §1.97, however, only the Abstracts of references A2-A5 have been considered because the remainder of the WO Documents have not been translated in English. Accordingly, the Examiner has considered the information disclosure statement, and a signed copy is enclosed herewith.

Applicants Information Disclosure Statement filed March 20, 2008 is acknowledged. The submission is in compliance with the provisions of 37 CFR §1.97. Accordingly, the Examiner has considered the information disclosure statement, and a signed copy is enclosed herewith.

Applicants Information Disclosure Statement filed August 4, 2008 is acknowledged. The submission is in compliance with the provisions of 37 CFR §1.97, however, only the Abstract of reference A8 has been considered because

the remainder of the WO Document has not been translated in English. Accordingly, the Examiner has considered the information disclosure statement, and a signed copy is enclosed herewith.

Priority

The reference to priority in the first line of the specification is acknowledged. It is noted that the instant application is the national stage entry of PCT/JP05/05824, filed March 29, 2005. It is also noted that certified copies of the priority document have been received in this national stage application.

Drawings

The Drawings filed September 28, 2006 are acknowledged and have been accepted by the Examiner.

Specification

It is noted that the instant specification at pages 1-3 lists numerous non-patent literature. If Applicants wish to have these references considered by the Office, Applicants should include them in an information disclosure statement filed under 37 CFR § 1.97.

Furthermore, the listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification

but must be submitted in a separate paper." Therefore, unless the references have been cited by the Examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4, 6-8, 10-13, 15, 17, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-4, 6-8, 10-13, 15, 17, and 19 are indefinite because the term "WT-1" is not clearly defined. Since abbreviations often have more than one meaning, it is suggested that inserting the full name of the Wilm's tumor gene would overcome the instant rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6-8, 10-13, 15, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hübinger et al. (Applicant's Reference A15 on the Information Disclosure Statement filed August 4, 2008).

Claim 1 is drawn to a cell growth-suppressing agent comprising any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted. Claims 2, 6 and 7 are dependent on claim 1 and include all the limitations of claim 1 with the further limitations wherein the double-stranded RNA comprises an RNA complementary to a 17AA site of WT1 gene transcript; wherein the agent targets a cancer cell; and wherein the agent targets a leukemia cell. Claim 8 is drawn to a cell death-inducing agent comprising any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted. Claims 10-12 are dependent on claim 8 and include all the limitations of claim 8 with the further limitations wherein the agent induces cell death through mitochondria; wherein the agent targets a cancer cell; and wherein the agent targets a leukemia cell. Claim 13 is drawn to an agent that enhances cancer cell sensitivity to an anticancer agent, wherein the agent comprises any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding

the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted. Claim 15 is drawn to an agent that enhances cancer cell sensitivity to a cell death-inducing agent wherein the agent any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted. Claim 17 is drawn to an agent that eliminates mitochondrial membrane potential in a cancer cell, wherein the agent any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted. Claim 19 is drawn to an agent that enhances cytochrome c release into cytoplasm, wherein the agent any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted.

Hübinger et al. disclose hammerhead anti-WT1 ribozymes (see Figure 1). Hübinger et al. also disclose anti-WT1 ribozyme vectors, wherein the vectors comprise double-stranded hammerhead ribozymes complementary to a WT1 gene transcript (see page 1227, second column and Figure 5). Hübinger et al. disclose that one particular ribozyme, RZ2, was directed against the 17AA motif. Hübinger et al. also disclose that the anti-WT1 ribozymes were used to inhibit

WT1 gene expression and proliferation in leukemia cells in culture (see Figures 7 and 8, respectively).

It is noted that Hübinger et al. are silent as to whether or not their double-stranded RNA complementary to a WT1 gene transcript are cell growth-suppressing agents; cell death-inducing agents; agents that enhance cancer cell sensitivity to an anticancer agent; agents that enhance cancer cell sensitivity to a cell death-inducing agent; agents that eliminate mitochondrial membrane potential in a cancer cell; or agents that enhance cytochrome c release into the cytoplasm. However, since the double-stranded RNA complementary to a WT1 gene transcript meets the structural limitations of the claimed invention, it is the Examiner's opinion that the hammerhead anti-WT1 ribozymes disclosed by Hübinger et al. are indeed cell growth-suppressing agents; cell death-inducing agents; agents that enhance cancer cell sensitivity to an anticancer agent; agents that enhance cancer cell sensitivity to a cell death-inducing agent; agents that eliminate mitochondrial membrane potential in a cancer cell; or agents that enhance cytochrome c release into the cytoplasm, absent evidence to the contrary.

The burden of establishing whether the double-stranded RNA complementary to a WT1 gene transcript disclosed by Hübinger et al. would have the additional function of being cell growth-suppressing agents; cell death-inducing agents; agents that enhance cancer cell sensitivity to an anticancer agent; agents that enhance cancer cell sensitivity to a cell death-inducing agent; agents that eliminate mitochondrial membrane potential in a cancer cell; or

agents that enhance cytochrome c release into the cytoplasm under generally any assay conditions falls to Applicant. See MPEP 2112.01, "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433." See also MPEP 2112: "[T]he PTO can require an Applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [her] claimed product." The MPEP at 2112 citing *In re Fitzgerald* 205 USPQ 594. 596, (CCPA 1980), quoting *In re Best* 195 USPQ 430 as per above. Therefore, it falls to Applicant to determine and provide evidence that the hammerhead anti-WT1 ribozymes disclosed by Hübinger et al. would or would not have the additional function of being cell growth-suppressing agents; cell death-inducing agents; agents that enhance cancer cell sensitivity to an anticancer agent; agents that enhance cancer cell sensitivity to a cell death-inducing agent; agents that eliminate mitochondrial membrane potential in a cancer cell; or agents that enhance cytochrome c release into the cytoplasm as instantly claimed.

Therefore, absent evidence to the contrary, claims 1, 2, 6-8, 10-13, 15, 17, and 19 are anticipated by Hübinger et al.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-4, 6-8, 10-13, 15, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagami et al. (Applicant's Reference A23

on the Information Disclosure Statement filed January 22, 2008) in view of Murata et al. (Applicant's Reference A21 on the Information Disclosure Statement filed January 22, 2008) and Hammond et al. (Nature Genetics 2001, Vol. 2:110-119).

Claim 1 is drawn to a cell growth-suppressing agent comprising any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted. Claims 2-4, 6 and 7 are dependent on claim 1 and include all the limitations of claim 1 with the further limitations wherein the double-stranded RNA comprises an RNA complementary to a 17AA site of WT1 gene transcript; wherein the double-stranded RNA comprises an RNA complementary to the nucleotide sequence of SEQ ID NO:1 present in a 17AA site of a WT1 transcript; wherein the agent targets a cancer cell; and wherein the agent targets a leukemia cell. Claim 8 is drawn to a cell death-inducing agent comprising any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted. Claims 10-12 are dependent on claim 8 and include all the limitations of claim 8 with the further limitations wherein the agent induces cell death through mitochondria; wherein the agent targets a cancer cell; and wherein the agent targets a leukemia cell. Claim 13 is drawn to an agent that enhances cancer cell

sensitivity to an anticancer agent, wherein the agent comprises any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted. Claim 15 is drawn to an agent that enhances cancer cell sensitivity to a cell death-inducing agent wherein the agent any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted. Claim 17 is drawn to an agent that eliminates mitochondrial membrane potential in a cancer cell, wherein the agent any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted. Claim 19 is drawn to an agent that enhances cytochrome c release into cytoplasm, wherein the agent any one of (a) to (c) as an active agent: (a) a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript, and an RNA complementary to said RNA; (b) a DNA encoding the double-stranded RNA of (a); and (c) a vector into which the DNA of (b) has been inserted.

It is noted that the instant specification at page 8, lines 2 and 3 discloses:

> ""17AA site" refers to a site corresponding to 17 amino acids of the WT1 gene transcript sequence in the 5' side site of the two alternative splicing sites present in the WT1 gene"

Determining the scope and contents of the prior art

Yamagami et al. teach antisense oligonucleotides complementary to a WT1 gene transcript (see Abstract and page 2878, last paragraph). Yamagami et al. taught that antisense oligonucleotides complementary to a WT1 gene transcript were used to inhibit WT1 expression in leukemia cell lines (see Figure 9). Yamagami et al. also taught that antisense oligonucleotides complementary to a WT1 gene transcript were used to inhibit proliferation and cell growth in leukemic cell lines (see Figures 2-7). Yamagami et al. also taught that antisense oligonucleotides were designed to different regions of the WT1 gene, including the 5' site (see Figure 1).

It is noted that Yamagami et al. are silent as to whether or not their antisense oligonucleotides complementary to a WT1 gene transcript are cell growth-suppressing agents; cell death-inducing agents; agents that enhance cancer cell sensitivity to an anticancer agent; agents that enhance cancer cell sensitivity to a cell death-inducing agent; agents that eliminate mitochondrial membrane potential in a cancer cell; or agents that enhance cytochrome c release into the cytoplasm. However, the burden of establishing whether the antisense oligonucleotides complementary to a WT1 gene transcript taught by Yamagami et al. would have the additional function of being cell growth-suppressing agents; cell death-inducing agents; agents that enhance cancer cell sensitivity to an anticancer agent; agents that enhance cancer cell sensitivity to a cell death-inducing agent; agents that eliminate mitochondrial membrane

potential in a cancer cell; or agents that enhance cytochrome c release into the cytoplasm under generally any assay conditions falls to Applicant. See MPEP 2112.01, "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433." See also MPEP 2112: "[T]he PTO can require an Applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [her] claimed product." The MPEP at 2112 citing *In re Fitzgerald* 205 USPQ 594. 596, (CCPA 1980), quoting *In re Best* 195 USPQ 430 as per above. Therefore, it falls to Applicant to determine and provide evidence that the antisense oligonucleotides complementary to a WT1 gene transcript taught by Yamagami et al. would or would not have the additional function of being cell growth-suppressing agents; cell death-inducing agents; agents that enhance cancer cell sensitivity to an anticancer agent; agents that enhance cancer cell sensitivity to a cell death-inducing agent; agents that eliminate mitochondrial membrane potential in a cancer cell; or agents that enhance cytochrome c release into the

cytoplasm as instantly claimed.

Ascertaining the differences between the prior art and the claims at issue

Yamagami et al. do not teach that the agent is double-stranded. Yamagami et al. also do not teach that the double-stranded RNA comprises an RNA complementary to a 17AA site of WT1 gene transcript.

Murata et al. teach that one splicing variant of WT1, WT1-17AA, induces G1 arrest and apoptosis in leukemia cells (see Abstract). Murata et al. also teach the desire to inhibit WT1 gene expression using antisense oligonucleotides.

Hammond et al. teach that antisense and RNA interference are two methods of silencing expression of a gene and that RNA interference possesses characteristics that make it superior to antisense. For example, on page 110, first column, Hammond teaches that antisense methods are straightforward but suffer from "questionable specificity and incomplete efficacy". RNA interference on the other hand, "has been shown in diverse organisms to inhibit gene expression in a sequence-specific manner" (same page and column) and requires only a few molecules of dsRNA per cell to silence expression. Hammond also teaches that the RNA interference phenomenon in animals was discovered by researchers who were using antisense techniques and found that the use of double stranded instead of single-stranded RNAs reduced gene expression tenfold more efficiently (see paragraph bridging pages 110-111).

Resolving the level of ordinary skill in the pertinent art

The level of ordinary skill in the pertinent art is considered to be high,

being a graduate student or post-doctoral fellow in a biological science.

Considering objective evidence present in the application indicating obviousness or nonobviousness

It would have been *prima facie obvious* to one of ordinary skill in the art, at the time the invention was made to make a cell growth-suppressing agent comprising as an active agent, a double-stranded RNA comprising an RNA complementary to a WT1 gene transcript using the teachings and motivation of Yamagami et al. combined with the teachings and motivation of Hammond et al. It would have been *prima facie obvious* to one of ordinary skill in the art, at the time the invention was made to have the double-stranded RNA comprise an RNA complementary to a 17AA site of WT1 gene transcript using the teachings and motivation of Yamagami et al. and Murata et al.

One of ordinary skill in the art would have been motivated to make a cell growth-suppressing agent comprising as an active agent, a nucleic acid complementary to a WT1 gene transcript since Yamagami et al. taught that such an agent could be used to regulate leukemogenesis. One of ordinary skill in the art would have been motivated to substitute the antisense nucleic acid molecule complementary to a WT1 gene transcript taught by Yamagami et al. with an double-stranded RNA that is complementary to a WT1 gene transcript as instantly claimed since it is obvious to substitute one functional equivalent for another, particularly when they are to be used for the same purpose. See MPEP 2144.06. Furthermore, one of ordinary skill in the art would have been motivated to substitute the antisense nucleic acid molecule complementary to a WT1 gene

transcript taught by Yamagami et al. with an double-stranded RNA that is complementary to a WT1 gene transcript as instantly claimed since Hammond et al. taught that RNA interference is superior to antisense.

One of ordinary skill in the art would have been motivated to have the double-stranded RNA comprise an RNA complementary to a 17AA site of WT1 gene transcript since Murata et al. taught the desire of such a site for determining the role of WT1 in leukemia cells.

One of ordinary skill in the art would have expected success at making a cell growth-suppressing agent comprising as an active agent, a nucleic acid complementary to a WT1 gene transcript since Yamagami et al. taught the successful use and design of such an agent at the time of filing. One of ordinary skill in the art would have expected success at substituting the antisense nucleic acid molecule complementary to a WT1 gene transcript taught by Yamagami et al. with an double-stranded RNA that is complementary to a WT1 gene transcript as instantly claimed because the substitution of one known element for another would have yielded predictable results at the time of the invention. One of ordinary skill in the art would have expected success at having the double-stranded RNA comprise an RNA complementary to a 17AA site of WT1 gene transcript since Murata et al. taught the successful use and design of such a site for antisense inhibition.

Therefore, the invention would have been *prima facie* obvious to one of ordinary skill in the art at the time of filing.

Conclusion

No claims are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terra C. Gibbs whose telephone number is 571-272-0758. The examiner can normally be reached from 9 am - 5 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James "Doug" Schultz can be reached on 571-272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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January 15, 2009
/Terra Cotta Gibbs/